UNITED STATES PATENT AND TRADEMARK OFFICE

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10/552,824	10/07/2005	Atsushi Murashima	Q90793	4350

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2009*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-27* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a)☐ All   b)☐ Some * c)☐ None of:
         1.☐ Certified copies of the priority documents have been received.
         2.☐ Certified copies of the priority documents have been received in Application No. _____.
         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Drawings

1.   Figure 1 should be designated by a legend such as --Prior Art-- because only

that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 3, 5, 7 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claims 3 and 7, line 4, it is not clear what the applicant refers to with "characteristic

amount", i.e., what constitutes the "characteristic amount"?

Claim 5, lines 3-4, it is not clear what determines the criteria for suitability when the

applicant claims "characteristics suitable".

Errors such as these are interspersed throughout the claim language and need to be

addressed and corrected.

Information Disclosure Statement

4.   The information disclosure statement filed 2/12/09 fails to comply with the

provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the references are *not* in

English, and no translations were provided. It has been placed in the application file,

but the information referred to therein has not been considered as to the merits.

Applicant is advised that the date of any re-submission of any item of information

contained in this information disclosure statement or the submission of any missing

element(s) will be the date of submission for purposes of determining compliance with

the requirements based on the time of filing the statement, including all certification

requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Objections

5.   Claim 18 is objected to because of the following informalities: the phrase "… first

code string data conforming to a first speech coding…", was deleted from the rest of the

independent claims, and appears to have been inadvertently left in, in claim 18.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   Claims 1-8, and 17-27 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. Claims 1-8, 17-27, are directed

toward a method and a computer program for code conversion, the specification

discloses software embodiments of the invention, which amounts to a computer

program. A computer program does not fall within one of the statutory classes of

invention under 35 USC 101, therefore, claims 1-8, 17-27 are directed toward a non-

statutory subject matter.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9.   Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ojala et al., (WO 99/38155).

As per claim 1, Ojala et al., teach a code conversion method for converting first code string data into second code string data, the method comprising the steps of: decoding the first code string data to generate a first decoded speech; correcting signal characteristics of the first decoded speech to generate a second decoded speech; and encoding the second decoded speech in accordance with the second speech coding scheme to generate the second code string data (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 2, Ojala et al., teach the code conversion method according to claim 1, wherein in the step of generating the second decoded speech, the signal characteristics are corrected by a filter having characteristics which vary in accordance with characteristics of the first decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 3, Ojala et al., teach the method according to claim 2, wherein the characteristics of the filter are varied using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 4, Ojala et al., teach the code conversion method according to claim 2 or 3, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is

a combination of the inverse filter and the emphasis filter (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 5, Ojala et al., teach the code conversion method according to claim 1, wherein in the step of generating the second decoded speech, the signal characteristics of the first decoded speech are corrected into signal characteristics suitable for re-encoding (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 6, Ojala et al., teach the code conversion method according to claim 5, wherein in the step of generating the second decoded speech, the signal characteristics are corrected by a filter having characteristics which vary in accordance with characteristics of the first decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 7, Ojala et al., teach the method according to claim 6, wherein the characteristics of the filter are varied using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 8, Ojala et al., teach the code conversion method according to claim 6 or 7, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of the inverse filter and the emphasis filter (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 9, Ojala et al., teach a code conversion apparatus for converting

first code string data into second code string data, the apparatus comprising: a speech

decoding circuit for decoding the first code string data to generate a first decoded

speech; a signal characteristic correcting circuit for correcting signal characteristics of

the first decoded speech to generate a second decoded speech; and a speech

encoding circuit for encoding the second decoded speech to generate the second code

string data (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines

11-26).

As per claim 10, Ojala et al., teach the code conversion apparatus according to

claim 9, wherein the signal characteristic correcting circuit corrects the signal

characteristics of the first decoded speech by a filter having characteristics which vary in

accordance with characteristics of the first decoded speech (page 8, lines 26-31, page

13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 11, Ojala et al., teach the code conversion apparatus according to

claim 10, wherein the characteristics of the filter are varied using at least one of frame

type information included in the first code string data, size of the first code string data,

and a characteristic amount which can be calculated from the first decoded speech

(page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 12, Ojala et al., teach the code conversion apparatus according to

claim 10 or 11, wherein the filter is an inverse filter to a post filter, an emphasis filter

having characteristics for emphasizing high-band components of frequency, or a filter

which is a combination of the inverse filter and the emphasis filter (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 13, Ojala et al., teach the code conversion apparatus according to claim 9, wherein said signal characteristic correcting circuit corrects the signal characteristics of the first decoded speech into signal characteristics suitable for re-encoding to generate the second decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 14, Ojala et al., teach the code conversion apparatus according to claim 13, wherein the signal characteristic correcting circuit corrects the signal characteristics of the first decoded speech by a filter having characteristics which vary in accordance with characteristics of the first decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 15, Ojala et al., teach the code conversion apparatus according to claim 14, wherein the characteristics of the filter are varied using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 16, Ojala et al., teach the code conversion apparatus according to claim 14 or 15, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of the inverse filter and the emphasis filter (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 17, Ojala et al., teach a program for causing a computer to execute the steps of: decoding a first code string data to generate a first decoded speech; correcting signal characteristics of the first decoded speech to generate a second decoded speech; and encoding the second decoded speech to generate a second code string data (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 18, Ojala et al., teach a program for causing a computer to execute the steps of: decoding a first code string data conforming to a first speech coding scheme to generate a first decoded speech; correcting signal characteristics of the first decoded speech using a filter having characteristics which vary in accordance with characteristics of the first decoded speech to generate a second decoded speech; and encoding the second decoded speech in accordance with a second speech coding scheme to generate a second code string data conforming to the second speech coding scheme (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 19, Ojala et al., teach a program for causing a computer to execute the steps of: decoding a first code string data to generate a first decoded speech; correcting signal characteristics of the first decoded speech into signal characteristics suitable for re-encoding to generate a second decoded speech; and encoding the second decoded speech to generate the second code string data (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 20, Ojala et al., teach a program for causing a computer to execute the steps of: decoding a first code string data to generate a first decoded speech; correcting signal characteristics of the first decoded speech into signal characteristics suitable for re-encoding, using a filter having characteristics which vary in accordance with characteristics of the first decoded speech, to generate a second decoded speech signal; and encoding the second decoded speech to generate the second code string data (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 21, Ojala et al., teach the program according to claim 18, wherein the characteristics of the filter are varied using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 22, Ojala et al., teach the program according to claim 18, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of the inverse filter and the emphasis filter (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 23, Ojala et al., teach the program according to claim 21, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of

the inverse filter and the emphasis filter (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 24, Ojala et al., teach a program for causing a computer to execute the steps of: decoding a first code string data to generate a first decoded speech; correcting signal characteristics of the first decoded speech into signal characteristics suitable for re-encoding, using a filter having characteristics which vary in accordance with characteristics of the first decoded speech, to generate a second decoded speech signal; encoding the second decoded speech to generate the second code string data conforming to the second speech coding scheme; and varying the characteristics of the filter using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first decoded speech (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 25, Ojala et al., teach the program according to claim 20, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of the inverse filter and the emphasis filter (page 8, lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

As per claim 26, Ojala et al., teach the program according to claim 24, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of

the inverse filter and the emphasis filter (page 8, lines 26-31, page 13, line 8 – page 14,

line 23, Fig. 8, page 15, lines 11-26).

As per claim 27, Ojala et al., teach a computer readable recording medium

having stored thereon the program according to any one of claims 17 to 26 (page 8,

lines 26-31, page 13, line 8 – page 14, line 23, Fig. 8, page 15, lines 11-26).

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Please see attached form PTO-892.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-

7601. The examiner can normally be reached on Monday Through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone

number for the organization where this application or proceeding is assigned is (571)

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Vijay B. Chawan/
Primary Examiner, Art Unit 2626

vbc
3/3/09